# BRUHATH BANGALORE MAHANAGARA PALIKE

## YELAHANKA ZONE ELECTRICAL DIVISION

**Name of the work :-** Detaild Estimate for Providing AB Cable and accessories in singapura main road to the main roads and Improvement of Electrical installations in Ganesha layout park in ward no.14.

**Budget Head:**

Estimate No. 29/24-25

**Est Cost Rs.** **1500000.00**

| Sl. No | SR Page No | Description | Unit | Qty | Rate | Amount |
|---|---|---|---|---|---|---|
| 1 | 11/4.1.1 | Fabricating, supplying and erecting Swaged tubular Pole of height ...m having three sections, and providing two coats of red oxide paint and finished with two coats of enamelled paint of approved quality and colour and M.S. base plate of suitable size welded at the bottom of the Pole(as per IS) and 40 mm dia GI/flexible PVC pipe of 1m length fitted to the heavy gauge polycarbonate control box including 5 Way connector of size 167 x 125 x 82 mm for 7.5M Pole/ 200 x 160 x 98 mm for remaining length of Pole with front opening cover, with locking arrangements and suitable capacity MCB/DP switch, The Pole shall be erected in cement concrete work (1:2:4) including excavation and refilling of planting depth of the Pole to the ground level and the coping CC shall be upto 0.6m above ground level as per IS2713-7.Erection of heavy duty Pole on Footpath/median 9m (5m Hb,165.1 mm dia 4.85 mm thick x 2m Hm, 139.7 mm dia 4.50 mm thick x 2m Ht,114.3 mm dia 3.65 mm thick) as per IS 410 SP 32 | Each | 8.00 | 15500.00 | 124000.00 |
| 2 | 56/13.4.4 | Supplying and fixing telescopic M.S. bracket fabricated by using 0.5m length 4" dia telescopic M. S. pipe, with 2" dia1.5m long M.S.Bracket and are welded with suitable angle, using 6mm thick M. S. sheet, grip bolts & nuts, as required, suitable for 9 to 12 ms. M. S. tubular pole, with necessary two coats of painting, with all other accessories.Double bracket 2x2 m. Length | Each | 8.00 | 2723.00 | 21784.00 |
| 3 | 56/13.1.2 | Supplying and Fixing of.....mm dia class A GI pipe bracket upto 2 ms long bent at suitable angle and fixing to this bracket street light fitting of all capacities to GI or GI or rail or RCC pole / wall using suitable clamps, bolts, and nuts and wiring using suitable capacity wires Using 32mm dia G.I.Pipe | Each | 20.00 | 1045.00 | 20900.00 |
| 4 | CSR 2023-24 56/13.4.2 | Supplying and fixing telescopic M.S. bracket fabricated by using 0.5m length 4" dia telescopic M. S. pipe, with 2" dia1.5m long M.S.Bracket and are welded with suitable angle, using 6mm thick M. S. sheet, grip bolts & nuts, as required, suitable for 9 to 12 ms. M. S. tubular pole, with necessary two coats of painting, with all other accessories.Single bracket 2 m. Length | Each | 10.00 | 1850.00 | 18500.00 |

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| 5 | 46/ 11.8.4 CSR 2023-24 | Supply of LED Streetlight luminaire with pressure die cast aluminium housing body for optimal thermal dissipation. Lamp compartment comprising of anti glare clear diffuser with Injection moulded polycarbonate material, delivering superior light output Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%, maximum light intensity should be between 60 degrees to 70 degrees. CCT > 5500K, IP66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor >0.9 with mains, Surge Protection- Min 5KV along with Over voltage/ Overload, short circuit/miss-wiring protection. Compatible for pole mounting with outer dia of 40mm to50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with .....W System Power consumption. LED Efficiency>1301m/w, nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008. Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 2 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED manufacturer & Cree/Nichia/Lumileds/Osram make LED Source.LED Streetlight 90 W | Each | 20.00 | 8860.00 | 177200.00 |
| 6 | CSR 2023-24/56/13.6 | Fixing charges of post top/ Gate/ Garden fitting /LED on the existing CI/ GI or any other pipe using required size of reducer, wiring using suitable wires. | Each | 20.00 | 198.00 | 3960.00 |
| 7 | 5/ 1.4.2 Vol-1 KPWD SR 2023-24 | Earth work excavation by manual means for drains, canals, waste weir, draft, approach channels, key trenches, foundation of Buildings & bridges and such simillar works in all kinds of soils, as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work. Depth exceeding 1.5m, but not exceeding 3m | $m^3$ | 9.60 | 259.00 | 2486.40 |
| 8 | 18/ 2.11 Vol-1 KPWD SR 2023-24 | Supplying, fitting and placing TMT FE 550 / 550D Steel Reinforcement including cost of all materials, machinery, labour, cleaning, straightening, cutting, bending, hooking, laping/ tying with binding wire / soft annealed steel wire and other ancilary operations complete as per drawing and technical specification. | Kgs | 163.76 | 89.45 | 14648.33 |
| 9 | 15/ 2.1.3 Vol-1 KPWD SR 2023-24 | Providing and laying in position Cement Concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machinery, curing, and all the other appurtenances required to complete the work as per technical specifications. Mix 1:3:6 Using 40 mm nominal size graded crushed coarse aggregates (15/ 2.1.3 Vol-1 KPWD SR 2023-24) | Cums | 1.60 | 5989.00 | 9582.40 |

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|---|---|---|---|---|---|---|
| 10 | 15/ 2.2.1 Vol-1 KPWD SR 2023-24 | Providing and laying in position Cement Concrete for all Foundation works. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticizers laid in finished layers, well compacted using needle vibrators, including all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all the other appurtenances required to complete the work as per technical specifications. M20 Design Mix Using 20 mm nominal size graded crushed coarse aggregates (15/ 2.2.1 Vol-1 KPWD SR 2023-24) | Cums | 7.20 | 6287.00 | 45266.40 |
| 11 | 13/32.08 CSR 2023-24 | 1.1 kV, XLPE or Heat resistant PVC insulated, PVC exutruted Inner Seath Armoured LTUG Cable as per IS-1554 (Part 1) or IS-7098 Part-1, Armouring strip thickness and resistivity as per IS-3975. 25 Sqmm, 4 Core, (13 GI Strips - 4 x 0.8 mm) | KM | 0.10 | 179844.00 | 17984.40 |
| 12 | 21/48.01 CSR 2023-24 | 1.1 kV Class HR (Heat Resistant) PVC Insulated & Sheathed Aluminium Single Core Lead wires as per IS-694: 2010 PVC Wire - 2.5 Sqmm Weight per 100 Mtr Coil: 1.8 Kg | Coil | 2.00 | 1484.00 | 2968.00 |
| 13 | 23/51.04 CSR 2023-24 | Rod type of earthing using 40 mm Dia, 3 Mtr long MS rod as ground rod, in earth pit of 300 mm width and 3300 mm depth and using 50x6 mm flat welded to ground rod as terminal & connected to equipment ground terminal using PVC Al wire as specified | No | 2.00 | 2172.00 | 4344.00 |
| 14 | 21/5.44.2 CSR 2023-24 | Supply and Installation / Fixing / Provision of Outdoor type Thermoplastic Modular Panel enclosure with transparent Polycarbonate Lid, shock proof, IP65 (Weather Proof), rust proof, dust proof, water proof, corrosion proof having internally Embedded gasket on both lid and flap suitable to fix Single Phase / Three Phase Energy Meter in suitable base plate and having a provision for Fuse / MCB cut-out with suitable transparent hinged flap opening for operating MCB along with complete tamper proof SEALING facility.300 mm x 450 mm x 214 mm | Each | 8.00 | 6163.00 | 49304.00 |
| 15 | 20/5.41.2 5 CSR 23-24 | Supplying and fixing angle iron frame work fabricated out of M.S.angle iron.. and M.S. Flat.....with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint.50 x 50 x 6 mm | m | 8.00 | 395.00 | 3160.00 |
| 16 | 21/5.47 | Supplying and fixing Microprocessor based Electronic timer (without contactor, Din Mounting using necessary bolts, nuts and washers etc.,,) 3-120sec setting | Each | 8.00 | 2315.00 | 18520.00 |
| 17 | 16/5.14.6 CSR 23-24 | Supply and fixing of 4pole power contactor with NO/NC contacts on existing wood/panel board using necessary bolts, nuts, washers and wiring etc., complete with AC-3 Rating and as per IS-13947.95/100 A | Each | 8.00 | 16606.00 | 132848.00 |
| 18 | 17/5.15.9 CSR 23-24 | Supplying and fixing Moulded Case Circuit Breaker (MCCB) over the existing wood/panel board using necessary screws, bolts, nuts, necessary phase separators, handle and wiring complete. Protection of Overload and Short circuit in Thermal Magnetic Release. Micro processor release shall have Earth Fault as per IS-13947. (Icu=100% Ics). In 4P MCCB, all Poles should have protection for Short-Cicrcuit/Over Load.For Microprocessor MCCBS Facility for segregating Priority and Non-Priority loads must be available in the MCCB. MCCB shall be provided with double insulation (insulation between front cover and internal power circuits to avoid any accidental contact with live current carrying path with the front cover open). Multi-pole breakers shall be designed to break all the poles simultaneously and they shall have a single mechanism.FOUR POLE100Amps 25kA. | Each | 8.00 | 8487.00 | 67896.00 |
| 19 | 17/5.18.1 CSR 23-24 | Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898.6-32Amps SP | Each | 16.00 | 415.00 | 6640.00 |

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| 20 | CSR 2023-24/3.9 | Supplying and fixing hylum plastic sheet 3mm thick with necessary nitches for fixing switches, regulators etc., and fixing on existing wood or metal box using N. F. screws | cm2 | 8800.00 | 0.35 | 3080.00 |
| 21 | CSR 2023-24/21.05 | Laying of cable in Existing Trench/GI pipe/Stone Ware/RCC Hume pipe using Wooden/Aluminum Rollers as directed by the departmental staf2.5 to 25 Sqmm LT Cable | KM | 0.10 | 20886.00 | 2088.60 |
| 22 | 18/42.07 CSR 2023-24 | 1.1 kV, LT Aerial Bunched Cable, XLPE insulation confirming to IS-14255: 1995 3x25 + 1x25 + 1x16 Sqmm Street light (InsulatedMessenger cum Neutral LT Cable | KM | 2.46 | 164831.00 | 405484.26 |
| 23 | 53/24.03 CSR 2023-24 | Stringing of 1.1 kV grade Aerial Bunched 3 Core cable of XLPE insulation of size (3x95) (Phase Conductor) + (1x70)(Insulated Messenger Neutral) + (1x16) (Street LightControl) | KM | 2.46 | 33109.00 | 81448.14 |
| 24 | 19/43.17 CSR 2023-24 | Dead End Clamp/Anchor Clamp Assembly 16 to 70 Sqmm Bare Messenger (Exclusive of Pole Clamp and Eye Hook) | No | 14.00 | 232.00 | 3248.00 |
| 25 | 18/310/43.2 CSR 2023-24 | Piercing Connector Suitable for 16 Sqmm - 95 Sqmm AB Cable - Street Light Connection | No | 96.00 | 186.00 | 17856.00 |
| 26 | 54/24.11 CSR 2023-24 | Pole Clamp-145 mm x 95 | No | 96.00 | 160.00 | 15360.00 |
| | | **Total** | | | | **1270556.93** |
| | | **Add 18 % GST on Total** | | | | **228700.25** |
| | | **Miscellaneous** | | | | **742.82** |
| | | **Grand TOTAL** | | | | **1500000.00** |

CERTIFICATE

1. The Place was inspected and work is essential.
2. The Provision made in the estimate is adequate and are necessary.
3. The Work comes in the BBMP limit and is legitimate charges on the Corporation Funds.
4. The rates in the Estimate is based on CSR 2023-24 , KPWD Vol-1 CSR 2023-24 and Approved Rates.

Asst./Junior Engineer (Elec)

Asst. Exe.Engineer (Elec)
Sub-Division No.
Bruhat Bangalore Mahanagara Palike

EXECUTIVE ENGINEER (ELEC)
YELAHANKA DIVISION
BRUHAT BANGALORE MAHANAGARA PALIKE

Administrative Sanction for Rs. 15,00,000/-
Rupees Fifteen Lakhs Only
is accorded under head PO298 M.andR
to Electrical Installations in Parks and Gardens Play Grounds
Registered as EE No. 23/2024-25 Subject to conditions contained in enclosed memo
No. BBMP/EE/ELE/AS/23/24-25
Dt 08-11-2024
Executive Engineer

TECHNICALLY SANCTIONED FOR Rs: 15,00,000/-
Rupees: fifteen Lakhs Only
Head of Account: PO298
Registered SE No. 84/2024-25 Subject to condition contained in the enclosed Memo
Administratively Approved By:
No. BBMP/EE/ELE/YZ/AS/23/24-25 Dt.
Dt. 08/11/2024
Tech. Asst. AE
SE (Elec.)